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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/601,050	06/20/2003	Anthony M. Olson	P1946US00	8455
24333 GATEWAY, II	7590 10/22/200 NC.	7 .	EXAM	INER
ATTN: Patent	Attorney		JONES, HEA	THER RAE
610 GATEWA MAIL DROP Y			ART UNIT	PAPER NUMBER
N. SIOUX CIT	Y, SD 57049		2621	
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			10/22/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

•	Application No.	Applicant(s)			
	10/601,050	OLSON, ANTHONY M.			
Office Action Summary	Examiner	Art Unit			
	Heather R. Jones	2621			
The MAILING DATE of this communication Period for Reply	appears on the cover sheet with the	correspondence address			
A SHORTENED STATUTORY PERIOD FOR RE WHICHEVER IS LONGER, FROM THE MAILING - Extensions of time may be available under the provisions of 37 CFF after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory per - Failure to reply within the set or extended period for reply will, by stany reply received by the Office later than three months after the mearned patent term adjustment. See 37 CFR 1.704(b).	COMMUNICATION THIS COMMUNICATION IN THE PROPERTY OF THE COMMUNICATION IN THE PROPERTY OF THE P	N. imely filed in the mailing date of this communication. ED (35 U.S.C. § 133).			
Status					
1) $igotimes$ Responsive to communication(s) filed on $\underline{0}$	N⊠ Responsive to communication(s) filed on <u>09 July 2007</u> .				
·—	- ·—				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
4) ⊠ Claim(s) 1-20 is/are pending in the applicat 4a) Of the above claim(s) is/are witho 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 1-20 is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction an	drawn from consideration.				
Application Papers	•				
9) The specification is objected to by the Exam 10) The drawing(s) filed on 20 June 2003 is/are Applicant may not request that any objection to Replacement drawing sheet(s) including the cor 11) The oath or declaration is objected to by the	: a)⊠ accepted or b)☐ objected to the drawing(s) be held in abeyance. So rection is required if the drawing(s) is o	ee 37 CFR 1.85(a). bjected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for fore a) All b) Some * c) None of: 1. Certified copies of the priority docum 2. Certified copies of the priority docum 3. Copies of the certified copies of the papplication from the International Bur * See the attached detailed Office action for a 	ents have been received. ents have been received in Applica priority documents have been received reau (PCT Rule 17.2(a)).	tion No ved in this National Stage			
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summar Paper No(s)/Mail [5) Notice of Informal 6) Other:	Date			

DETAILED ACTION

Specification

- 1. The disclosure is objected to because of the following informalities:
 - a. Page 7, line 5: change "writer 34" to --writer 32--.
 - b. <u>Claim or Claims</u>: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or claims must commence on separate sheet or electronic page (37 CFR 1.52(b)(3)).

Appropriate correction is required.

Response to Arguments

2. Applicant's arguments filed July 9, 2007 have been fully considered but they are not persuasive.

The Applicant argues on page 9, lines 10-12 that the optional storage section disclosed by Browne et al. is a removable storage device, possibly a floppy disk within a disk drive or other such removable storage device. The Examiner agrees that Browne et al. can be a removable storage device, but it is not limited to only that. Browne et al. states that the optional storage device (104b) may include a removable storage device, but it does not state that that is what it is or that it is only limited to that. Furthermore, regardless of the type of storage device the optional storage device is the multi-source recorder player (100) still keeps track of the total amount of "on-line" storage capacity (page 11, lines 3-11).

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The Applicant argues on page 10, lines 3-5 that since Browne et al.'s removable media is intended to be removed for long term storage, the virtual storage management (VSM) would not be able to track it as soon as it is removed for long term storage of compressed data. The Examiner respectfully disagrees. Utsunomiya et al. discloses virtual storage management (VSM) logic configured to track the location of the second memory (4) on the network, and to store a portion of the program P in the second memory (4) (Figs. 1 and 11; paragraphs [0083] – [0085]). Furthermore, the device disclosed in Fig. 1 in the Utsunomiya et al. reference is a VCR, which would include a removable medium and the device is still keeping track of the of the programs stored on each removable medium. Therefore, when Utsunomiya et al. is combined with Browne et al. the idea of tracking programs and memory capacity with removable mediums is capable in the Browne et al. reference.

The Applicant argues on page 10, lines 11-12 that neither Browne et al. or Utsunomiya et al. discloses that the VSM logic is configured as part of the PVR. The Examiner respectfully disagrees. Utsunomiya et al. discloses that the dispersed storage location information may be stored in electronic information equipment connected to the bus and taking part in the recording processing, or may be stored in other electronic information equipment connected to the bus, such as a personal computer (paragraph [0086]). Furthermore, Utsunomiya et al. discloses an example using a personal computer as the location where the

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dispersed storage location information is stored, but further discloses that any of the recorder/players can store the information (paragraph [0098]).

Claim Rejections - 35 USC § 103

- 3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 4. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Browne et al. (WO 92/22983) in view of a Utsunomiya et al. (U.S. Patent Application Publication 2002/0066113).

Regarding claim 1, Browne et al. discloses a system useful for storing a television program P, comprising: a PVR (100) having a first memory (104), a network interface device (105a), and logic configured to copy the television program P into memory (the controller (105) copies the television program P into memory); and a second memory (104b) in communication with the PVR (100) via the network interface device (105a) (Fig. 1; page 10, line 32 – page 11, line 11). However, Browne et al. fails to disclose virtual storage management (VSM) logic configured to track the location of the second memory on the network, and to store a portion of the program P in the second memory.

Referring to the Utsunomiya et al. reference, Utsunomiya et al. discloses a recording system useful for storing a television program P, comprising: a first memory (3), a network interface drive, and logic configured to copy the television

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program P into memory (control unit 10 copies the television program P into memory); a second memory (4) in communication with the recording system via the network interface device; and a virtual storage management (VSM) logic configured to track the location of the second memory (4) on the network, and to store a portion of the program P in the second memory (4) (Figs. 1 and 11; paragraphs [0083] – [0085]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the teaching of using virtual storage management logic as disclosed by Utsunomiya et al. with the PVR as described by Browne et al. in order to allow the PVR to efficiently playback recordings, especially when a portion of a program is recorded in the first memory and another portion of the program is recorded in the second memory. Furthermore, by recording portions of a program in more than one device allows the user to use the memory devices to their fullest capabilities.

Regarding claim 2, Browne et al. in view of Utsunomiya et al. discloses all the limitations as previously discussed with respect to claim 1 including that the VSM logic is configured to track the total amount of memory storage on the network that is available for storing at least a portion of a program (Browne et al: Fig. 3 – auto recording storage allocation (305); page 20, line 38 – page 21, line 3; Utsunomiya et al.: paragraphs [0044] and [0047]).

Regarding claim 3, Browne et al. in view of Utsunomiya et al. discloses all the limitations as previously discussed with respect to claim 1 including that the

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VSM logic is configured to track the memory locations of a plurality of portions P(i) of the program P (Utsunomiya et al.: Fig. 11; paragraphs [0083]–[0085]).

Regarding claim 4, Browne et al. in view of Utsunomiya et al. discloses all the limitations as previously discussed with respect to claim 1 including that the VSM logic is configured to perform at least one of: (a) track which memory devices on the network are currently active in recording or playback; (b) track the memory locations of previously stored programs; (d) inform the user when a memory device holding at least a part of a program is off-line; (e) request the user to bring on-line a memory device that is off-line; (f) inform a user before the total available on-line memory runs out; (g) allow the user to set a memory lower limit for the VSM logic to inform the user prior to running out of memory; and (h) after informing the user of the memory lower limit condition, further provide the user the option to erase previously stored programs in real time (Utsunomiya et al.: Fig. 11 – tracks the memory locations of previously stored programs).

Regarding claim **5**, Browne et al. in view of Utsunomiya et al. discloses all the limitations as previously discussed with respect to claim 1 as well as further comprising an archival memory device in communication with the PVR; and archival storage management (ASM) logic configured to store the program P on the archival memory device (Browne et al.: page 10, line 32 – page 11, line 11 – the optional storage section may include removable media for long term storage; Utsunomiya et al.: Figs. 1 and 4; paragraphs [0043] and [0083]-[0085]).

Regarding claim **6**, Browne et al. in view of Utsunomiya et al. discloses all the limitations as previously discussed with respect to claims 1 and 5 including that the archival memory device comprises a DVD-R device (Browne et al.: page 10, line 32 – page 11, line 11 – the optional storage section may include removable media for long term storage; Utsunomiya et al.: Figs. 1 and 4; paragraph [0043] – the disk (18) can be optical disk).

Regarding claim 7, Browne et al. in view of Utsunomiya et al. discloses all the limitations as previously discussed with respect to claim 1 including that the first memory and the second memory each comprises a hard disk drive (Browne et al. page 10, line 32 – page 11, line 11; Utsunomiya et al.: paragraph [0043] – the disk (18) can be a hard disk).

Regarding claims **8-14**, grounds for rejecting claims **1-7** and **20** apply for claims **8-14** in their entirety.

Regarding claims **15-18**, these are method claims corresponding to the apparatus claims 1, 2, 5, and 20. Therefore, claims 15-18 are analyzed and rejected as previously discussed with respect to claims 1, 2, 5, and 20.

Regarding claim **19**, Browne et al. discloses a method of playing back a program using a PVR, each memory device (104 and 104b) in communication with the PVR, at least one of the memory devices (104b) in communication with the PVR via a network (105a), the method comprising: playing back a program through at least the PVR (playing back a program that is stored in the first memory device (104)); and playing back a program through the network (105a)

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and through the PVR (playing back a program stored in the second memory (104b)) (Fig. 1; page 10, line 32 – page 11, line 11). However, Browne et al. fails to disclose playing back a program P, wherein the program is stored in at least two portions, each portion is stored on a separate memory device and using VSM logic of the PVR to track locations of each of the portions stored on the separate memory devices.

Referring to the Utsunomiya et al. reference, Utsunomiya et al. discloses a method of playing back a program P, the program stored in at least two portions, each portion stored on a separate memory device, the memory comprising: playing back a first portion; and playing back a second portion through the network (Figs. 1, 11, and 12; paragraphs [0083] – [0085]). Furthermore, Utsunomiya et al. discloses using VSM logic of the PVR to track locations of each of the portions stored on the separate memory devices (Figs. 1 and 11; paragraphs [0083] – [0086] and [0098]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the teaching of using virtual storage management logic as disclosed by Utsunomiya et al. with the PVR as described by Browne et al. in order to allow the PVR to efficiently playback recordings, especially when a portion of a program is recorded in the first memory and another portion of the program is recorded in the second memory. Furthermore, by recording portions of a program in more than one device allows the user to use the memory devices to their fullest capabilities.

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Regarding claim **20**, Browne et al. in view of Utsunomiya et al. discloses all the limitations as previously discussed with respect to claim 1 including that the VSM logic is configured as part of the PVR (Utsunomiya et al.: paragraphs [0086] and [0098]).

Conclusion

5. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Heather R. Jones whose telephone number is 571-272-7368. The examiner can normally be reached on Mon. - Thurs.: 7:00 am - 4:30 pm, and every other Fri.: 7:00 am - 3:30 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on 571-272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Heather R Jones Examiner Art Unit 2621

HRJ October 15, 2007

ANDRÉW Y. KOENIG
PRIMARY PATENT EXAMINER